

substance of the Office Action, Applicants respectfully traverse the rejections in light of the admonitions by the Federal Circuit Court of Appeals in In re Thrift, Case Number 01-1445 (Fed. Cir. August 9, 2002) against rejections based on a “very general and broad conclusion of obviousness” when “cited references do not support each limitation” in a claim. In Thrift, the Federal Circuit found that:

While the examiner’s statement **generally addresses** the use of grammar, it does not discuss the unique limitations of extracting, modifying, or processing the grammar to interact with hypermedia sources. The Board’s decision is not supported by substantial evidence because the cited references **do not support each limitation** of claim 11. See In re Vaeck, 947 F.2d 488, 493, 20 USPQ2d 1438, 1444 (Fed. Cir. 1991) [emphasis added].

The references cited by the Examiner fail, in the aggregate, to disclose all of the elements and functionality in the Applicants’ claims. For example, all of the references cited by the Examiner with respect to Applicants’ claim 16 fail to disclose the element of an “invoice” much less the functionality of “generating” or “transmitting” a “maintenance invoice” without “human intervention.” In fact, the Office Action itself fails to discuss any type of “invoice.”

Moreover, there is no affirmative suggestion or motivation in the art to combine the references as asserted by the Examiner. The references cited by the Examiner actually teach away from each other and utilize different approaches to solve different problems. Furthermore, the Applicants’ invention teaches away from the references cited by the Examiner.

I. CLAIMS 16 AND 43-48

Claims 16 and 43-48 (“Claims Group A”) were rejected by the Examiner under 35 U.S.C. 103(a) as being unpatentable over Yamamoto et al., U.S. Patent No. 6,141,629 (“Yamamoto”) in view of the article by Bob Deierlein in Beverage World titled “New lease on truck life: automated maintenance” (“Deierlein”) and the article by Ira Sager in Business Week titled “The Great Equalizer” (“Sager”).

A. The References fail to disclose all of the elements and process steps in Claims Group A

A rejection pursuant to 103(a) requires the existence of references disclosing each of the Applicants' claim elements and process steps. See In re Vaeck, 947 F.2d 488, 293, 20 USPQ2d 1438, 1443 (Fed. Cir. 1991). The references fail to disclose each of the Applicants' claim elements and process steps, and thus the claims in Claims Group A are in condition for allowance. Contrary to the assertions by the Examiner, the cited references fail to disclose even one of the four process steps in Claim 16, the independent claim in Claim Group A.

1. **“generating a maintenance invoice when service is performed on the asset wherein the maintenance invoice includes an indication of the amount of usage of the asset”**

Terms such as “invoice” or “maintenance invoice” fail to appear anywhere in the Office Action, much less the references cited against Claim Group A. The three references cited by the Examiner are not discussed in the Office Action with respect to an “invoice” or “maintenance invoice” elements. Moreover, Yamamoto fails to disclose any type of multi-entity awareness, much less billing or invoice functionality that is necessarily dependent upon multi-entity awareness. Sager and Deierlein hint generally and broadly with respect to the concept contractual relationships, but disclose absolutely no information with respect to the actual processes and functionality being performed. The disclosures in Sager and Deierlein are at too high of a level to be applied as prior art to Claim Group A.

In Sager, the only reference to billing functionality is a one extremely general reference to “big investments in technology to automate such as order entry or billing” in paragraph 5 of page 1. Deierlein discloses that “the supplier will be billed directly” in paragraph 3 of page 2, but does not provide any detail with respect to exactly how this is done. The citation of Sager or Deierlein with respect to the first step of claim 16 is improper in light of the In re Thrift admonition against rejecting claims with references that merely “generally address” the subject matter of the claim.

The failure of the cited references to disclose all of the elements and functionality in claim 16 are highlighted by the failure of the cited references to perform functionality “without human intervention.” To the extent that Deierlein discloses any billing functionality, a human user of the system must first activate the system “by touching a coin-shaped, data-memory button on the vehicle with a probe from the computer (paragraph 3, page 1).” In contrast, the Applicants’ claims are performed “without human intervention” using “data acquisition devices 32 and the communications system 33 and 34” to automatically capture the “operational characteristics and other information regarding the assets 31 (line 9-11.” The relevant data is “automatically sensed and transmitted” without the use of an attendant or technician to activate a process or attach a sensor to the asset.

2. “transmitting the maintenance invoice to an administrative controller”

As discussed above, the cited references cannot disclose the functionality of “transmitting the maintenance invoice” because those references fail to disclose an “invoice” much less a “maintenance invoice.” However, the cited references all fail to disclose an “administrative controller” as claimed in Claim Group A.

None of the references cited by the Examiner disclose the use of an “administrative controller.” As noted on Page 11 of the Applicants’ specification, “administrative controllers 55” are provided to request and receive management information generated by the remote analysis system 50.” None of the references cited by the Examiner disclose transmitting any type of billing information to a controller that can receive information from a remote analysis system that receives information from local controllers. The failure of Yamamoto to disclose an “administrative controller” is discussed in greater detail below with respect to Claim Group B. None of the cited references discloses a controller or computer that receives information from an analysis system that is also remote from the site. Moreover, the cited references as a whole fail to disclose the functionality of this step “without human intervention.”

3. “comparing the indication of the amount of usage of the asset with a predetermined standard that is representative of the warranty period”

The three references when viewed in the aggregate, fail to disclose the third step of claim 16. As admitted by the Examiner, the Yamamoto disclosure does not mention any awareness for other business entities, and thus cannot disclose the processing of a “warranty” or a “warranty period.” The only mention of warranties in Sager relates to the ability to “negotiate longer warranties from suppliers [emphasis added] (paragraph 3, page 1), and not the ability to determine whether a repair would be covered by a warranty. In Deierlein, the computer “informs the technician if a repair is covered by a warranty [emphasis added] (paragraph 3, page 2). In contrast to Deierlein, which requires a human technician, all aspects of Claim Group A are performed “without human intervention.” Moreover, Deierlein does not disclose how warranty determinations are performed by the system. As mentioned above, the reference is written at an extremely high level of abstraction and without the detail necessary to preclude Claim Group A. Deierlein does not disclose an indication reflecting the amount of usage. Deierlein disclose neither a warranty period nor a predetermined standard used to compare information. At most, Deierlein can be said to “generally address” the functionality of warranties without disclosing all of the Applicants’ claim elements. Thus, Deierlein cannot be used to support a 103(a) rejection with respect to those elements. As none of the other references cited by the Examiner disclose such elements, Claim Group A is in condition for allowance.

4. “generating a warranty report if the amount of usage is less than the predetermined standard.”

As discussed above, neither Yamamoto nor Sager can be asserted to disclose the ability to apply a warranty policy to an asset. Warranties and warranty processing are totally absent from the Yamamoto disclosure. In Sager, the disclosure asserts an improvement with respect to the ability to “negotiate a warranty [emphasis added] (paragraph 3, page 1)”, but not the ability to apply a warranty much less the existence of a “warranty report” based on an “amount of

usage.” Deierlein fails to disclose the element of a “warranty report” and thus cannot be said to disclose the ability of “generating a warranty report.” Deierlein is concerned with negotiating better future warranties for future equipment, not applying existing warranties to existing equipment.

Even if Deierlein could be asserted to disclose the above process step, the Deierlein disclosure specifically includes the need of a human operator to activate the system “by touching a coin-shaped, data-memory button (paragraph 3, page 1). Thus, neither Deierlein nor the aggregate references can be said to disclose the step of “generating a warranty report” in a way that is “without human intervention.”

5. Claim 43-wherein the entity performing service on the asset is not the owner

Contrary to the Examiner’s citation of Lines 5-10 on Page 1 of Sager, Sager does not disclose the limitation of a non-owner providing service. There is nothing in the Sager reference to refute the conclusion that Ryder both owns the trucks, and provides service on the trucks. The ability to “negotiate longer warranties from suppliers” supports the conclusion that Ryder purchases the trucks from its suppliers, not that trucks are operated by non-owners. As the elements of claim 43 are not cited in the prior art, claim 43 is in condition for allowance.

6. Claim 45-wherein the maintenance invoice is generated for a second entity on behalf of a first entity

As mentioned above, none of the references cited by the Examiner disclose an “invoice” much less a “maintenance invoice.” Thus, claim 45 is in condition for allowance.

7. Claim 46-wherein the warranty report is generated for a second entity on behalf of a first entity

As mentioned above, none of the references cited by the Examiner disclose a “warranty report” much less a warranty report generated by one entity on behalf of another entity. At most, Ryder can be said to generate a report on behalf of itself, not a separate entity. The ability to “negotiate longer warranties” in the future is not the same thing as the ability to generate a

warranty report in the present on the basis of a presently existing warranty. The reference cited by the Examiner does no more than “generally address” warranties, as is prohibited by In re Thrift. Claim 46 is in condition for allowance.

7. Claim 47-determining when service should be performed on the asset based on the amount of usage of the asset

No reference is provided by the Examiner to support the assertion that “it would have been obvious to include the amount of usage of an asset at the time of failure or maintenance.” Sager discloses data collection in order to “negotiate longer warranties (Page 1, Lines 10-15)” not to determine when service should be performed. Pursuant to MPEP 2144.03, the Applicants request that the Examiner either provide a reference to support the assertion of obviousness, or provide a notarized affidavit in support of the assertion. Without evidence that the prior art discloses the claim elements, claim 47 is in condition for allowance.

8. Claim 48-wherein service must be performed on an asset before the amount of usage of the asset is compared to the predetermined standard

No reference is provided by the Examiner to support the assertion that “it would have been obvious to repair an asset without referring to a warranty if the communication system was down and the maintenance data could not be obtained instantly.” Pursuant to MPEP 2144.03, the Applicants request that the Examiner either provide a reference to support the assertion of obviousness, or provide a notarized affidavit in support of the assertion. Otherwise, claim 48 is in condition for allowance.

B. There is no motivation or suggestion to combine references as asserted by the Examiner that renders Applicants' claims obvious

The Examiner cannot point to an affirmative suggestion or motivation in the art to combine the references as asserted by the Examiner. That is because the references teach away from each other, and the Applicants' claims.

1. Yamamoto teaches away from the Applicants' Claims and the Ryder References

Yamamoto affirmatively teaches away from the Ryder truck references of Deierlein and Sager and the Applicants' claims.

Yamamoto is exclusively concerned with the inner technical workings of an individual machine. There is no cognizance in Yamamoto that different organizations sell, purchase, use, fix, lease, and otherwise interact with industrial equipment and other forms of assets. There are frequent references in Yamamoto to the providing of "in-house" maintenance. Thus, Yamamoto focuses exclusively on the technical aspects of an individual machine. Even the "worldwide" communication network (Column 8, Lines 27-34), there is no evidence in the Yamamoto that any type of aggregate or statistical analysis is ever performed. In summary, Yamamoto seeks only to answer one narrow question—when should maintenance next be performed with respect to a particular component in a particular machine. None of the process steps in Claim 16 relate to this question in even a general way. Yamamoto teaches away from the Applicants' claims. Similarly, Yamamoto also teaches away from the Ryder References of Sager and Deierlein.

2. The Ryder References teaches away from the Applicants' Claims and Yamamoto

Deierlein discloses a system for "gathering information on engine performance and fuel consumption (Page 1, Line 8)." The Ryder References disclose a system for capturing empirical data, and using that data to "negotiate longer warranties from suppliers" and otherwise better

manage an inventory of assets. In contrast to Yamamoto, the Ryder References do not disclose any cognizance of the specific internal working of a machine. In fact, the Ryder References focus on data capture and analysis for an after-the-fact analysis for use in future management decisions. The Ryder References exhibit no cognizance of the technical inner-workings of an asset for the purpose of determining when maintenance work should be performed on that asset. In Applicants' claim 16, none of the process steps are geared towards an after-the-fact analysis. In the Ryder References, there is no disclosure of applying contractual warranties or generating invoices. In summary, there is no suggestion or motivation in the art to combine references as suggested by the Examiner. All claims in Claim Group A are in condition for allowance.

II. CLAIMS 21-24, 27-35, and 38-42

Claims 21-24, 27-35, and 38-42 ("Claim Group B") were rejected by the Examiner under 35 U.S.C. 103(a) as being unpatentable over Yamamoto et al., U.S. Patent No. 6,141,629 ("Yamamoto") in view of Bazilai, et. al, U.S. Patent No. 6,012,045 ("Barzilai").

A. Yamamoto and Barzilai fail to disclose all of the elements in Claim Group B

Contrary to the admonition in In re Thrift, the Examiner addressed the meanings of "analysis controller," "local controller," and "data acquisition device" in an overly broad manner, resulting in an improper rejection of the claims in Claim Group B.

- 1. Contrary to the assertions of the Examiner, neither Yamamoto nor Barzilai discloses an analysis controller located at a second location remote from said local controller that is responsive to said acquired data**

Neither Yamamoto nor Barzilai discloses an analysis controller located at a second location from the local controller. Contrary to the assertions of the Examiner, the input terminal (element 21 in Fig. 12 of Yamamoto) cannot constitute an "analysis controller" of Applicants' Claim 21. For Element 21 in Fig. 12 to constitute an "analysis controller," the unmanned dump trucks at 10, 11, 12, and 13 of Fig. 12 would need to constitute "local controllers" because Applicants' Claim 21 provides that "an analysis controller . . . is responsive to said acquired data

from a plurality of local controllers for generating an analysis of said acquired data from said plurality of said local controllers.” The dump trucks at 10, 11 12, and 13 of Yamamoto Fig. 12 cannot constitute “local controllers” because each “local controller” is associated with a “receiver” that receives “acquired data” sent by a “transmitter” after being captured by a “data acquisition device.” **For the Examiner’s assertion to be correct, the unmanned dump trucks at 10, 11, 12, and 13 of Yamamoto Fig. 12 would need to include a data acquisition device, a transmitter for *intra*-truck communication, a receiver to receive an intra-truck communication, and a local controller located on the truck to forward the intra-truck communication to the analysis controller.** Yamamoto fails to disclose that each truck contains a transmitter, a receiver, and a local controller for transmitting acquired data relating to a truck and a receiver on that same truck. Thus, the computer at 21 in Fig. 12 of Yamamoto cannot be an “analysis controller located at a second location remote from said local controller.”

Confirming the conclusion that Yamamoto does not disclose an analysis controller as claimed by the Applicants is the fact that the disclosure in Yamamoto provides absolutely no mention of an analysis done in a remote fashion is any different than the analysis done locally with respect to the need to replace a particular component. The Yamamoto disclosure does not disclose any ability to perform an aggregate analysis involving more than one machine.

2. Contrary to the assertions of the Examiner, neither Yamamoto nor Barzilai can disclose both a “data acquisition device for sensing at least one operating characteristics” and a “local controller”

The Examiner’s interpretation of “data acquisition device” and “local controller” are inconsistent, indicating that the cited references do not disclose the “data acquisition device” and the “local controller” as claimed by the Applicants. Various sensors such as engine sensors are discussed in Column 4, Lines 20-50 of Yamamoto. The Office Action ignores the distinction between a data acquisition device and a local controller, and instead applies an extremely general view of such elements, as prohibited by In re Thrift. The Examiner improperly concluded that the sensors in Column 4, Lines 20-50 constitute both “data acquisition devices” and “local

controllers.” This interpretation ignores the distinctions in Claim Group B. By the very terms included in the claims, the “local controller” in the Applicants’ claims receives data from a “receiver” receiving information sent through a “transmitter.” Despite these limitations which distinguishes a “local controller” from a “data acquisition device,” **the Examiner classifies Column 4, Lines 30-50 as a “local controller” even though the sensor described is an engine RPM sensor**, a device that would be located in the engine, and would not require the use of a receiver to receive input. In the terminology of the Applicants’ claims, an RPM sensor would be a data acquisition device, not a local controller. This discrepancy indicates that the Examiner’s reading of Yamamoto is flawed. In summary, the Examiner’s assertion that Column 4, Lines 30-50 disclose a “local controller” is an erroneous assertion. If by some stretch of interpretation the assertion were correct, then the assertion that Column 4, Lines 20-29 discloses a “data acquisition device” would be in error.

3. **No cited reference discloses “transmitting said acquired data from said data acquisition device through space to said receiver.”**

The word “space” and the functionality of transmitting data through space does not appear within the Office Action or the cite references.

4. **No cited reference discloses “an administrative controller separate from said analysis controller, wherein said analysis controller transmits said analysis of said data to said administrative controller**

The Office Action does not address the limitation of an administrative controller separate from an analysis controller. The Examiner cites Column 9, Lines 18-23 in Yamamoto to support the disclosure of both administrative controllers and analysis controllers. Thus, the cited references do not disclose administrative controllers separate from analysis controllers.

5. The cited references do not disclose “responsible parties” or “automatically determining which of said responsible parties has responsibility in whole or in part for maintenance performed on the asset based on said warranty”

Yamamoto does not disclose any cognizance of entity-based awareness, and thus Yamamoto cannot be said to disclose processing based on “responsible parties.” Yamamoto is silent on concepts of ownership, suppliers, customers, users, manufacturers, and service providers. Barzilai discloses a very limited form of entity-awareness, one that is limited to buyers and sellers at the time in which a buyer makes a bid to purchase an asset. After a purchase occurs with Barzilai, there is no subsequent processing, no follow-up of responsibilities, no dividing of roles between the buyer and the seller. In the Applicants’ claims, post-transaction asset usage determines which party is a “responsible party.” Barzilai cannot be said to disclose this functionality because Barzilai is silent on any type of post-sale processing. Barzilai ends before the Applicants’ invention begins. Barzilai cannot be said to disclose the application of a warranty to a factual situation, much less the “automatic” application of a warranty without human intervention.

B. There is no suggestion or motivation in the art to combine references as asserted by the Examiner

Yamamoto ignores all non-technical information. There is no awareness of warranties, invoices, contracts, business-based utilization data, contracting entities, manufacturers, etc. Moreover, Yamamoto does not attempt in any way to aggregate data to generate an analysis. Rather, Yamamoto is focused solely on the benefit of keeping machines running on an individualized basis. Yamamoto may permit “world-wide” processing as asserted by the Examiner, but that simply means that Yamamoto may perform processing on an individual machine by individual machine basis, on machines located anywhere in the world. Thus, in contrast to Examiner’s assertions, Yamamoto does not teach a “global management system.” No

matter the geographic scope of machines “managed” by a Yamamoto system, such a system is not equipped for any analysis reaching outside of the scope of a single individual machine. Yamamoto discloses no awareness of any coordination or time dependency between activities. Moreover, Yamamoto is totally unconcerned with the relationships between various entities, and the contracts that may define such relationships. Yamamoto can only answer the question of when the next maintenance work for a particular machine is to take place.

In contrast, Barzilai discloses an electronic bid and auction system exclusively concerned solely with activities leading up to sale. Barzilai has no post-sale awareness to support the processing as claimed by the Applicants, or as disclosed by Yamamoto. Barzilai treats each asset as a black box, in contrast to both the Applicants’ invention and Yamamoto. The data used by Barzilai is totally different than the type of data used by Yamamoto.

The Applicants’ claims are primarily concerned with management aspects of equipment, not purely technical aspects. Thus, Yamamoto and the Applicants’ claims teach away from each other. Similarly, Barzilai teaches away from both Yamamoto and the Applicants’ claims because Barzilai is focused solely on the point of sale, and exhibits no interest in the ongoing use of the assets. Barzilai is an auction system, but the auctioneer is no longer concerned with an item after the auction is over. In summary, there is no suggestion or motivation in the art to combine references as suggested by the Examiner.

II. CLAIMS 25, 26, 36, and 37

Claims 25-26 and 36-37 (“Claim Group C”) were rejected by the Examiner under 35 U.S.C. 103(a) as being unpatentable over Yamamoto et al., U.S. Patent No. 6,141,629 (“Yamamoto”) in view of Bazilai, et al, U.S. Patent No. 6,012,045 (“Barzilai”) and further, in view of Huang et al, U.S. Patent No. 5,953,707 (“Huang”).

The claims in Claim Group C are dependent claims of the claims in Claim Group B, and thus the claims in Claim Group C are in condition for allowance for the same reasons that the claims in Claim Group B are in condition for allowance. However, the claims in Claim Group C are independently allowable on the basis of claim elements not disclosed in the prior art.

A. The cited references do not disclose “procurement” or “utilization” reports

None of the cited references discloses the ability to create “procurement” or “utilization” reports. The ability of Huang to perform a search based on a search criteria is not the same functionality as analyzing and/or aggregating data to generate procurement and utilization reports. The decision in In re Thrift prohibits such an over-generalized approach. Thus, the claims in Claim Group C are in condition for allowance.

B. There is no suggestion or motivation to combine the references as asserted by the Examiner

Huang discloses an inventory management system that teaches away from both Yamamoto and Barzilai. Each asset in Huang is a mere “black box” in contrast to Yamamoto which is exclusively concerned with the inner workings of a machine. In contrast to Barzilai, Huang incorporates no aspects on intra-entity awareness, where Barzilai is exclusively concerned with generating a sale. As discussed above, the other references teach away from each other, and the Applicants’ claims.

There is no affirmative suggestion in the art to combine these references. There is no overlap in the processing performed by the three systems. The fact that a combination of features can be useful is not to say that patent law treats such a combination as obvious.

CONCLUSION

Claims 16 and 21-48 are in condition for allowance. It is believed that any additional fees due with respect to this paper have already been identified in any transmittal accompanying this paper. However, if any additional fees are required in connection with the filing of this paper that are not identified in any accompanying transmittal, permission is given to charge account number 18-0013 in the name of Rader, Fishman and Grauer PLLC.

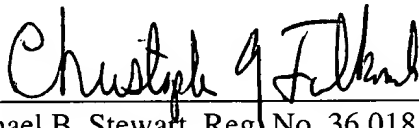
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